

ABSTRACT

A device for visualizing structure located on the interior of a biological substance. The device includes a marker member that may be a solid cylinder or lumen having an interior volume having a distal end removably insertable in the biological substance relative to the interior structure to be visualized. An image-enhancing material is contained relative to the marker member in a manner such that the imaging material does not directly contact the biological substance. The imaging material of choice is one capable of producing an emission or signal detectable external to the biological substance by suitable imaging instrumentation. Also disclosed is a method for visualizing critical structures or radiation therapy targets in imaging processes such as positron emission tomography and/or single photon emission computerized tomography, MRI, or ultrasound either used alone or in combination or in registration with anatomical imaging processes such as computed tomography or mammography.